Foreign Comparative Testing (FCT) U.S.-ROK Defense Industry Consultative Committee Meeting

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FCT Mission

Mission: Find, Assess & Field World-Class Technologies to Enhance Military Capabilities and Provide Long-Term Value

- ***Technologies should present:***
  - ***Significant cost savings resulting in positive ROI***
  - ***Significant performance enhancements***
  - ***Novel approaches***
- ***Connects Foreign Technologies to US DoD Development and Acquisition Programs***
- ***Office of the Secretary of Defense (OSD) Selects & Funds Projects, US Military Services & USSOCOM Execute Testing***

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Measuring Progress
- Last 36 Years -

- *OSD investment: $1.30 Billion (constant FY16 $)*
  - *Led to procurements of 273 projects worth over $11B*
- *Accelerates Fielding an Average of 2 - 4 Years*
  - *Vice starting a new US defense R&D program*
- *Enhances U.S. Industrial Base*
  - *Foreign vendors teaming with U.S. industry*
  - *34 states & 1/3 of projects procured*
- *Average project – $600-800K/year, 18-24 months*
  - *Review 100's of technologies*
  - *10 – 12 new starts / year*

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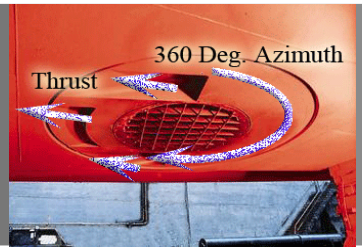
FCT Evaluation Options

Developmental Prototype (TRL 6)

Operational Prototype (TRL 7)



Qualification Test (TRL 8-9)

Assessment

Transition/ Procurement

FCT Projects Can Be Side-by-Side Comparative Evaluations

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Prototyping Focus Areas for 2017

Asymmetric Force Application

Asymmetric force application is the use of nontraditional technologies, tactics, and weapons to provide a clear military advantage to our forces during maneuver and engagement operations.

Electromagnetic Spectrum Agility

The increasingly wireless nature of the global economy, coupled with advances in analog-to-digital conversion, cognitive radios, smart antennas, and increased transmitter-receiver diversity, present opportunities to develop new capabilities that sustain and extend our military advantage in the EMS domain. These new capabilities will also mitigate the impact of new challenges, including an increasingly cluttered operational EMS environment.

Autonomous Systems

Autonomous systems are a "capability (or a set of capabilities) that enables a particular action of a system to be automatic or, within programmed boundaries, 'self-governing". Autonomous systems can improve our capability without increasing capacity by better coordinating and synchronizing current sensors and weapon systems and by maximizing the efficiency of both.

Information Operations and Analytics

Exploit commercial technology advancements in information collection and management to provide the Joint Force enhanced communications and Situational Awareness within their Area of Responsibility to disrupt and delay adversary forces from offensive operations, counter their ability to use deceptive messaging to influence U.S. / Coalition operations and develop capabilities to counter adversary cyber and C2 communications.

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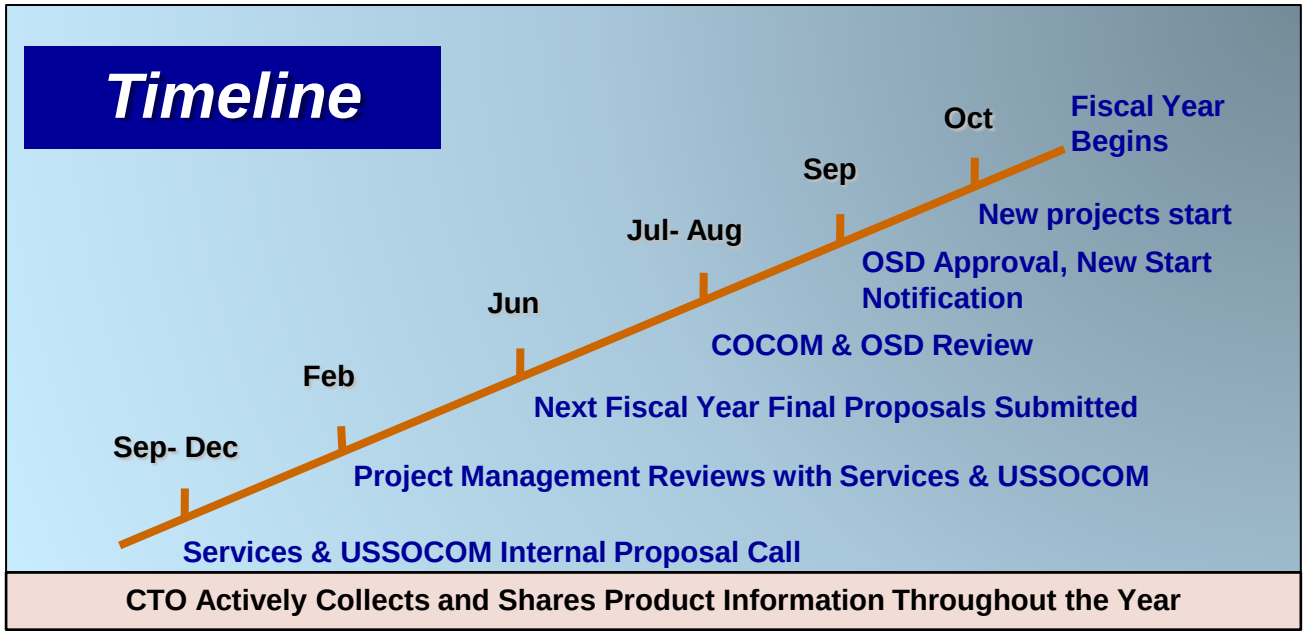
FCT Process



Selection Criteria:

Top Down

- OSD Priorities
- Joint Application
- Long Term Value
- Cost Avoidance

Bottom-Up

- Mission Need
- Procurement Strategy
- Sponsor Support / Endorsement
- Risk (Cost/Schedule/Performance)

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Past FCT Projects with ROK

Project	Description
Lithium-Ion Polymer Battery	Test and analyze advanced large Li-Ion cells for integration to a BA XX80 (battery) configuration
Laser Marksmanship Training System "Hummerbook"	Evaluate ruggedized, environmentally resistant scoring device, to extend/enhance the capability of the U.S. Army's Laser Marksmanship Training System
Large Scale Display System	Evaluate 30"-42" flat panel display product capabilities for potential application in display requirements for C2 and other applications

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Working with FCT

- ***Marketing Materials***
- ***Product templates***
- ***Individual meetings with FCT***
- ***Trade shows, local conferences, e.g. AUSA, Modern Day Marine, etc.***
- ***Industry days in the Washington, DC area***
- ***CTO international travel***

FCT has a variety of tools to understand your technology

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Send Us Your Product Information

Product Template

- Product
- Company Name
- Country
- POC Information
- Website
- TRL
- Countries Using
- Application (So What?)
- Science (How it works)
- Data (key performance metrics)
- US Partners
- Previous Work w/ DoD

OSD Foreign Comparative Test – Product Template

Product: XX mm High Velocity (HV) Airburst Munitions System (ABMS)

Company Name: Advanced Systems (AS)
Country: Republic of Antarctica
Point of Contact: Mr. Jones
Phone: (555) 555-5555
Website: www.abcd.com
Email: abcd@abcd.com

Short Description: The HV ABMS consists of a Fire Control System, an Ammunition Programmer and XX x XX mm Air Burst Munitions. High explosive, Flash and Bang, Counter defilade, increased lethality, improved accuracy.

Technology Readiness Level (fielded, lab tested, operational test): TRL: 9 The HV ABMS is qualified and in production.

Countries using the technology: Madagascar, Dominican Republic, Greenland, etc.

Application: (the so what?) The HV ABM is specially designed to allow soldiers to effectively engage enemies in defilade and to provide improved accuracy and higher lethality through a technologically improved muzzle velocity compensation capability.

Science (how it works): Muzzle velocity compensation for the immediate round fired. The 40mm HV ABMS is an upgrade kit to existing launchers to provide Air Bursting Precision capability. The FCS accurately lazes the target and the ballistic card computes the time to burst. The computed time to burst based on the measured velocity is programmed into the fuze only upon exit at the ammunition programmer. Enhanced safety with its built-in self-destruct mode and gives ABM the ability to function as a point detonating HE cartridge as well as an Air-Burst cartridge.

Data:
• Grenade Length: XX mm • Weight : XXX gm
• Muzzle Velocity : XXX m/s • Maximum Range: XXXX m
• Lethal Radius : X m • Arming Distance : XX to XX m
• Fuze Type : Programmable Time Fuze

U.S. Partner: AS does not currently have a relationship with a US company.

Previous work with DoD: Technology developed through US DoD laboratory funding.

Help Us Understand How Your Technology is Better, Cheaper or Novel

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How to Get More Info

- ***CTO Website -- https://cto.acqcenter.com/osd/portal.nsf/***
  - ***Additional background information on FCT***
- ***Contact your Embassy in DC – Defense Attaché or the trade or science and technology organization***
- ***Contact the Security Cooperation Office / Attachés in the US Embassy in your country***
- ***Contact CTO directly – either the main office or Service/SOCOM specific contacts given in this brief***

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Key Points of Contact

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